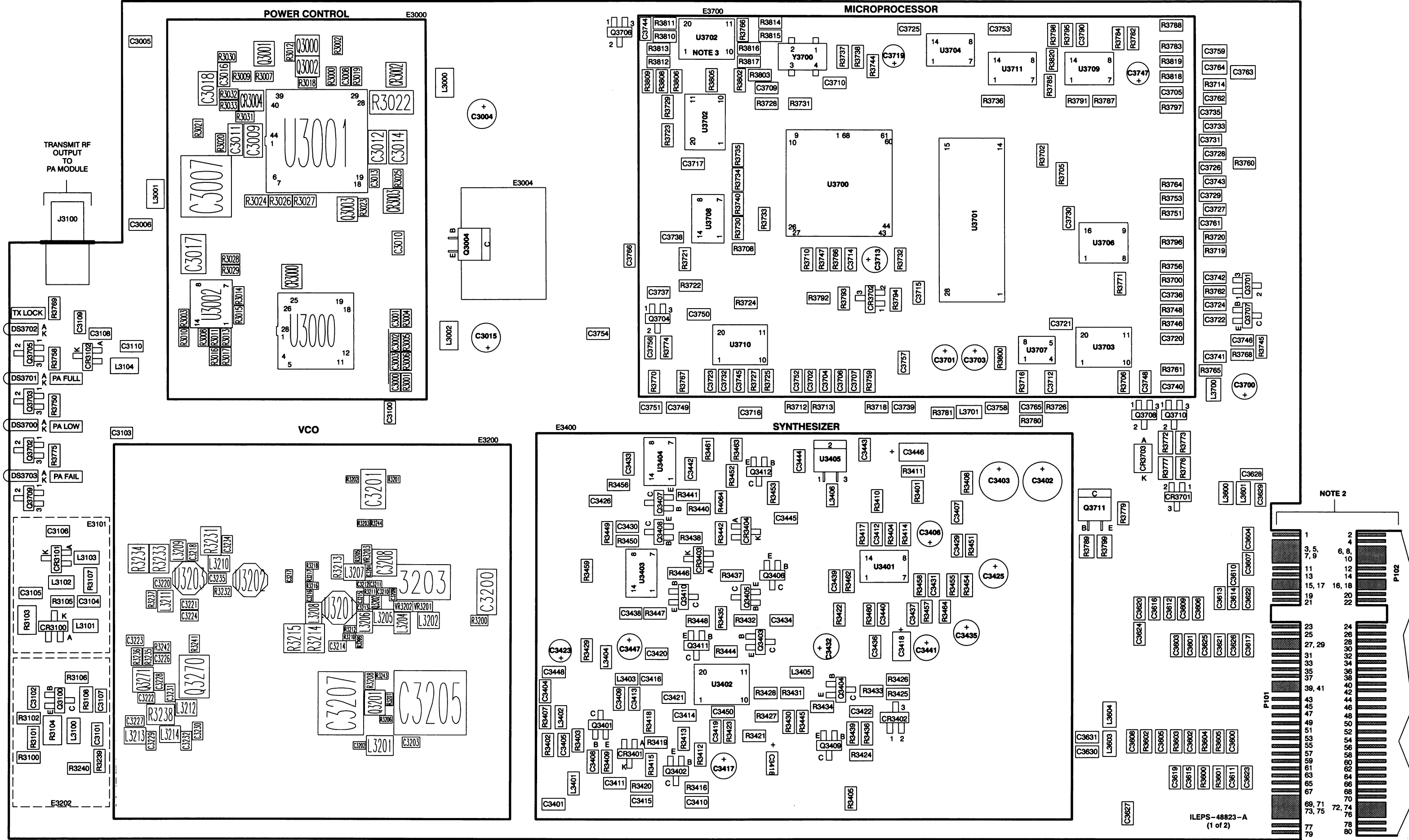


800 MHz EXCITER BOARD
MODEL TLF6920G



- NOTES:
- THIS COMPONENT LOCATION DETAIL IS NOT DRAWN TO EXACT SCALE AND SPACING BETWEEN OBJECTS IS INTENTIONALLY REDUCED.
 - THE CIRCUIT BOARD EDGE CONNECTOR HAS PRINTED CIRCUIT PLATED CONTACTS ON BOTH SIDES OF THE BOARD EDGE. THE COMPONENT SIDE CONTACTS ARE REFERENCED AS P101. THE CONTACTS ON THE BACK OF THE BOARD ARE REFERENCED AS P102. P102 CONTACT LAYOUT IS SHOWN IN THE CUTAWAY VIEW JUST TO THE RIGHT OF THE P101 CONTACT LAYOUT. IN ADDITION, P101 CONTAINS ODD NUMBERED CONTACTS AND P102 CONTAINS EVEN NUMBERED CONTACTS.
 - U3712 AND ASSOCIATED CIRCUITRY PROVIDES VERSION ID OF EXCITER BOARD. RESISTORS R3802 THRU R3817 ARE FACTORY PLACED OR OMITTED TO GENERATE 8-BIT BINARY CODE TO IDENTIFY BOARD VERSION. SHOWN WITH ALL RESISTORS PLACED.

SEE THE FOLLOWING TABLE FOR EDGE CONNECTOR PIN NUMBERING/SIGNAL NAME CROSS-REFERENCE.

CONNECTOR-PIN	SIGNAL NAME	CONNECTOR-PIN	SIGNAL NAME
P101-1	CHASSIS GND	P102-2	CHASSIS GND
P101-3, 5, 7, 9	14.2V	P102-4	NOT USED
P101-11	+5V	P102-6, 8, 10	14.2V
P101-13	CHASSIS GND	P102-12	+5V
P101-15, 17	V-CONTROL	P102-14	CHASSIS GND
P101-19	TX VFWD	P102-16, 18	V-CONTROL
P101-21	NOT USED	P102-20	NOT USED
P101-23	CHASSIS GND	P102-22	NOT USED
P101-25	EXT WM VFWD	P102-24	CHASSIS GND
P101-27, 29	CHASSIS GND	P102-26	EXT WM REFL
P101-31	ANT RLY ENABLE	P102-28	EXT CIRC
P101-33	NOT USED	P102-30	CHASSIS GND
P101-35	NOT USED	P102-32	EXT MON VOLTAGE 1
P101-37	ADAPTIVE TUNE 2	P102-34	NOT USED
P101-39, 41	CHASSIS GND	P102-36	ADAPTIVE TUNE 1
P101-43	Y1 MUX1	P102-38	FANS ON
P101-45	Y2 MUX2	P102-40	CHASSIS GND
P101-47	Y3 MUX3	P102-42	X1 MUX1
P101-49	MUX SELECT B	P102-44	X2 MUX2
P101-51	CHASSIS GND	P102-46	X3 MUX3
P101-53	MOSI HOST	P102-48	MUX SELECT A
P101-55	RESET	P102-50	CHASSIS GND
P101-57	NOT USED	P102-52	MISO HOST
P101-59	SPI GRANT	P102-54	CLK HOST
P101-61	NOT USED	P102-56	NOT USED
P101-63	NOT USED	P102-58	NOT USED
P101-65	SPI REQ	P102-60	NOT USED
P101-67	TX TO HOST REQ	P102-62	NOT USED
P101-69, 71, 73, 75	CHASSIS GND	P102-64	NOT USED
P101-77	REF AUDIO	P102-66	PTT REQ
P101-79	CHASSIS GND	P102-68	CHASSIS GND
		P102-70	REF OSC
		P102-72, 74, 76	CHASSIS GND
		P102-78	VCO AUDIO
		P102-80	CHASSIS GND

800 MHz EXCITER BOARD

MODEL TLF6920G

parts list

TLF6920G Exciter Board (800 MHz)

PL-13032-B

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
C3004	2380090M36	capacitor, fixed:
C3432	2113740A43	CAP 100 UF 25V
C3005,3006	2113740A43	39 pF, ±5%; 50 V
C3007	2380090M36	CAP 100 UF 25V
C3008	2113740A39	27 pF, ±5%; 50 V
C3009	2311049A06	0.47 uF, ±10%; 35 V
C3010	2113741B69	0.1 uF, ±5%; 50 V
C3011	2311049A03	0.22 uF, ±10%; 35V
C3012	2311049A08	1 uF, ±10%; 35 V
C3013	2113740A39	27 pF, ±5%; 50 V
C3014	2311049A08	1 uF, ±10%; 35 V
C3015	2380090M36	CAP 100 UF 25V
C3016	2113741B69	0.1 uF, ±5%; 50 V
C3017	2380090M18	1 uF, ±20%; 50 V
C3100 thru 3102	2113740A43	39 pF, ±5%; 50 V
C3103	2113741A57	0.033 uF, ±5%; 50 V
C3104,3105	2113740A43	39 pF, ±5%; 50 V
C3106	2113740A24	6.8 pF, ±0.25 pF; 50 V
C3107	2113741B69	0.1 uF, ±5%; 50 V
C3108	2113740A24	6.8 pF, ±0.25 pF; 50 V
C3109,3110	2113740A43	39 pF, ±5%; 50 V
C3200	0811017A08	0.01 uF, ±5%; 50 V
C3201	2380090M06	10 uF, ±20%; 16V
C3202	2113740F41	39 pF, ±5%; 50V
C3203	2113741A45	0.01 uF, ±5%; 50 V
C3204	2113742C02	CAP CER CHIP 0.2PF + - .05PF 100V
C3205	2380090M27	330 uF, ±20%; 16 V
C3207	2380090M36	CAP 100 UF 25V
C3208	2113906B03	CAP CER CHIP CL1 LSR 2.5/3.5PF
C3209	2113742K23	CAP CER CHIP 2.4PF ± 0.05PF
C3210	2113742C22	CAP CER CHIP 2.2PF + - .10PF 100V
C3211	2113742K42	CAP CER CHIP 5.6PF ± 0.1PF
C3212	2113742K38	CAP CER CHIP 4.7PF ± 0.1PF
C3213	2113740F41	39 pF, ±5%; 50V
C3214	2113741A53	0.022 uF, ±5%; 50 V
C3216,3217	2113740F41	39 pF, ±5%; 50V
C3218	2113740A43	39 pF, ±5%; 50 V
C3222	2113741A45	0.01 uF, ±5%; 50 V
C3223,3224	2113740A43	39 pF, ±5%; 50 V
C3226	2113740A43	39 pF, ±5%; 50 V
C3227	2113740G09	1.8 pF, ±0.1 pF; 50 V
C3228	2113741A45	0.01 uF, ±5%; 50 V
C3229	2113740A17	3.9 pF, ±0.25 pF; 50 V
C3230,3231	2113740A43	39 pF, ±5%; 50 V
C3232	2113740G09	1.8 pF, ±0.1 pF; 50 V
C3233	2113740G13	2.7 pF, ±0.1 pF; 50 V
C3234,3235	2113740A43	39 pF, ±5%; 50 V
C3401	2113740G03	1 pF, ±0.1 pF; 50 V
C3402,3403	2380090M28	220 uF, ±20%; 16 V
C3404,3405	2113740A43	39 pF, ±5%; 50 V
C3406	2380090M24	10 uF, ±20%; 50 V
C3407	2113741B69	0.1 uF, ±5%; 50 V
C3408,3409	2113741A57	0.033 uF, ±5%; 50 V
C3410	2113741B69	0.1 uF, ±5%; 50 V
C3411	2113741A45	0.01 uF, ±5%; 50 V
C3412	2113741A37	4700 pF, ±5%; 50 V
C3413	2113740G13	2.7 pF, ±0.1 pF; 50 V
C3414,3415	2113741B69	0.1 uF, ±5%; 50 V
C3416	2113740A43	39 pF, ±5%; 50 V
C3417	2380090M24	10 uF, ±20%; 50 V
C3418	2311049A19	10 uF, ±10%; 25 V
C3419	2113740A67	330 pF, ±5%; 50 V
C3420	2113740A43	39 pF, ±5%; 50 V
C3421,3422	2113741B69	0.1 uF, ±5%; 50 V
C3425	2380090M36	CAP 100 UF 25V
C3426	0811051A18	0.68 uF, ±5%; 63 V
C3429	2113741A33	3300 pF, ±5%; 50 V
C3430	0811051A11	0.047 uF, ±5%; 63 V

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
C3431	2113740A33	82 pF, ±5%; 50 V
C3442	2380090M24	10 uF, ±20%; 50 V
C3433	0811017A08	0.01 uF, ±5%; 50 V
C3434	2113740A43	39 pF, ±5%; 50 V
C3435	2380090M24	10 uF, ±20%; 50 V
C3436	2113741A33	3300 pF, ±5%; 50 V
C3437,3438	2113741B69	0.1 uF, ±5%; 50 V
C3439	2113740A71	470 pF, ±5%; 50 V
C3440	2113741B69	0.1 uF, ±5%; 50 V
C3441	2380090M24	10 uF, ±20%; 50 V
C3442	2113741B69	0.1 uF, ±5%; 50 V
C3443	2113740A43	39 pF, ±5%; 50 V
C3444	2113741B69	0.1 uF, ±5%; 50 V
C3445	2113740A43	39 pF, ±5%; 50 V
C3446	2311049A21	22 uF, ±10%; 20 V
C3447	2380090M24	10 uF, ±20%; 50 V
C3448	2113740A39	39 pF, ±5%; 50 V
C3449	2113740A07	1.5 pF, ±0.1 pF; 50V
C3450	2113740A43	39 pF, ±5%; 50 V
C3600	2113740A33	15 pF, ±5%; 50 V
C3601	2113740A55	100 pF, ±5%; 50 V
C3602	2113740A33	15 pF, ±5%; 50 V
C3603	2113740A55	100 pF, ±5%; 50 V
C3604	2113741A53	0.022 uF, ±5%; 50 V
C3605	2113740A33	15 pF, ±5%; 50 V
C3606	2113740A55	100 pF, ±5%; 50 V
C3607	2113741A53	0.022 uF, ±5%; 50 V
C3608	2113740A33	15 pF, ±5%; 50 V
C3609	2113740A55	100 pF, ±5%; 50 V
C3610	2113741A53	0.022 uF, ±5%; 50 V
C3611	2113740A33	15 pF, ±5%; 50 V
C3612	2113740A55	100 pF, ±5%; 50 V
C3613,3614	2113741A53	0.022 uF, ±5%; 50 V
C3615	2113740A33	15 pF, ±5%; 50 V
C3616	2682953X01	100 pF, ±5%; 50 V
C3617	2113741A53	0.022 uF, ±5%; 50 V
C3619	2113740A39	27 pF, ±5%; 50 V
C3620	2113740A55	100 pF, ±5%; 50 V
C3621,3622	2113741A53	0.022 uF, ±5%; 50 V
C3623	2113740A39	27 pF, ±5%; 50 V
C3624	2113740A55	100 pF, ±5%; 50 V
C3625,3626	2113741A53	0.022 uF, ±5%; 50 V
C3627	2113740A43	39 pF, ±5%; 50 V
C3628,3629	2113741B69	0.1 uF, ±5%; 50 V
C3630,3631	2113740A39	27 pF, ±5%; 50 V
C3700,3701	2380090M07	47 uF, ±20%; 16 V
C3703	2380090M24	10 uF, ±20%; 50 V
C3705	2113740A39	27 pF, ±5%; 50 V
C3707	2113740A39	27 pF, ±5%; 50 V
C3709,3710	2113740A37	22 pF, ±5%; 50 V
C3712	2113740A39	27 pF, ±5%; 50 V
C3713	2380090M24	10 uF, ±20%; 50 V
C3714	2113741A45	0.01 uF, ±5%; 50 V
C3715	2113741B69	0.1 uF, ±5%; 50 V
C3716	2113740A39	27 pF, ±5%; 50 V
C3717	2113741B69	0.1 uF, ±5%; 50 V
C3719	2380090M18	1 uF, ±20%; 50 V
C3720	2113740A55	100 pF, ±5%; 50 V
C3721	2113741B69	0.1 uF, ±5%; 50 V
C3722 thru 3724	2113740A39	27 pF, ±5%; 50 V
C3725	2113741B69	0.1 uF, ±5%; 50 V
C3726 thru 3729	2113740A39	27 pF, ±5%; 50 V
C3730	2113741B69	0.1 uF, ±5%; 50 V
C3731 thru 3733	2113740A39	27 pF, ±5%; 50 V
C3735	2113740A33	27 pF, ±5%; 50 V
C3736	2113740G11	2.2 pF, ±0.1 pF; 50 V
C3737	2113740A70	27 pF, ±5%; 50 V
C3738	2113741B69	0.1 uF, ±5%; 50 V
C3739	2113740A55	100 pF, ±5%; 50 V
C3740	2113740G11	2.2 pF, ±0.1 pF; 50 V

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
C3741,3742	2113740A39	27 pF, ±5%; 50 V
C3744,3745	2113740A39	27 pF, ±5%; 50 V
C3746	2113740A77	0.82 pF, ±5%; 50 V
C3747	2380090M18	1 uF, ±20%; 50 V
C3748	2113740A39	27 pF, ±5%; 50 V
C3749	2113740A39	27 pF, ±5%; 50 V
C3750	2113741B69	0.1 uF, ±5%; 50 V
C3751	2113740A55	100 pF, ±5%; 50 V
C3752	2113740A39	27 pF, ±5%; 50 V
C3753	2113741B69	0.1 uF, ±5%; 50 V
C3754	2113740A43	39 pF, ±5%; 50 V
C3756	2113740A77	0.82 pF, ±5%; 50 V
C3757,3758	2113740A39	27 pF, ±5%; 50 V
C3759	2113741B69	0.1 uF, ±5%; 50 V
C3761,3762	2113740A39	27 pF, ±5%; 50 V
C3763,3764	2113741B69	0.1 uF, ±5%; 50 V
C3765,3766	2113740A39	27 pF, ±5%; 50 V
C3790	2113741B69	0.1 uF, ±5%; 50 V
CR3000	4813833C10	diode (see note): 0.1A, 70 V
CR3002	4813833C05	15 pF, ±5%; 50 V
CR3003	4813825A05	Hot Carrier
CR3100 thru 3102	011079B23	Pin.35 V
CR3401	4813825A05	Hot Carrier
CR3402	4813833C05	15 pF, ±5%; 50 V
CR3403,3404	4813833C10	0.1A, 70 V
CR3701,3702	4813833C05	15 pF, ±5%; 50 V
CR3703	4813833B01	Schottky type
DS3700	4882198T05	SUBMINEATURE LED YEL SM
DS3701,3702	4882198T06	SUBMINEATURE LED GRN SM
DS3703	4882198T04	SUBMINEATURE LED RED SM
E3004	2680509U01	mechanical parts: Heatsink, DPAK
E3101	2682953X01	SHLD RCVR 18X24MM
E3201,3202	2682953X01	SHLD RCVR 18X24MM
SH3202	2683380X01	SHEILD, VCO, 800
J3100	0984393T01	connector: receptacle: UHF
L3000 thru 3002	2484657R01	inductor: ferrite bead
L3100	2462587X54	IND CHIP LO—PRO 120 NH 5%
L3101 thru 3104	2411087A14	0.10 uH
L3201	2484657R01	ferrite bead
L3202	2462587X55	IND CHIP LO—PRO 150 NH 5%
L3203	9183223X02	RESONATOR COAX CERAMIC
L3204	2462587X43	IND CHIP LO—PRO 15.0 NH 5%
L3205 thru 3208	2462587X55	IND CHIP LO—PRO 150 NH 5%
L3209,3210	2462587X51	IND CHIP LO—PRO 68.0 NH 5%
L3212	2462587X51	IND CHIP LO—PRO 68.0 NH 5%
L3213,3214	2462587X41	IND CHIP LO—PRO 10.0 NH 5%
L3401	0611079A20	4.7 nH, ±5%
L3402	2462587X57	CHIP IND Iopro 220 NH 5%
L3403	2462587R16	4.7 nH, ±5%
L3209	0662057A53	CHIP RES 1500 OHMS 5%
L3210	0662057A56	CHIP RES 2000 OHMS 5%
L3211	0662057A13	CHIP RES 33 OHMS 5%
L3212	0662057B47	CHIP RES 0 OHMS + - .050 OHMS
L3213	0611077E31	221 ohms, ±1%; 1/8W
L3214,3215	0611072A37	330 1/4 W
L3216	0662057A29	CHIP RES 150 OHMS 5%
L3217	0662057A15	CHIP RES 39 OHMS 5%
L3218	0662057A29	CHIP RES 150 OHMS 5%
L3231	0611072A33	220 ohms, ±5%, 1/4 W
L3232	0611079A01	O ohms, ±5%; 1/10 W
L3233	0611072A33	220 ohms, ±5%, 1/4 W
L3235	0611079A82	2200 ohms, ±5%; 1/10 W
L3236	0611079A70	680 ohms, ±5%; 1/10 W
L3237	4813827A03	PNP
L3238	4813827A03	PNP
L3239	4813827A03	PNP
L3240	4813824A17	PNP

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Q3405 thru 3407	4813824A10	NPN
Q3408	4813824A17	PNP
Q3409,3410	4813824A10	NPN
Q3411	4813824A17	PNP
Q3412	4813824A10	NPN
Q3701 thru 3706	4884955T01	NPN
Q3707	4813824A10	NPN
Q3708 thru 3710	4884955T01	NPN
Q3711	4813822A09	PNP
resistor, fixed:		
R3000	0611079A98	10K, ±5%; 1/10 W
R3001	0611079A66	470 ohms, ±5%; 1/10 W
R3002	0611079A98	10K, ±5%; 1/10 W
R3003	0611079B47	1 MEG, ±5%; 1/10 W
R3004 thru 3006	0611079A66	470 ohms, ±5%; 1/10 W
R3007	0611079A98	10K, ±5%; 1/10 W
R3008	0611079A74	1K, ±5%; 1/10 W
R3009	0611079A92	5600 ohms, ±5%; 1/10 W
R3010	0611079A98	10K, ±5%; 1/10 W
R3011	0611079B23	100K, ±5%; 1/10 W
R3012	0611079A98	10K, ±5%; 1/10 W
R3013 thru 3015	0611079B23	100K, ±5%; 1/10 W
R3016	0611079A74	1K, ±5%; 1/10 W
R3017	0611079A88	3900 ohms, ±5%; 1/10 W
R3018	0611079A74	1K, ±5%; 1/10 W
R3019	0611079A98	10K, ±5%; 1/10 W
R3020,3021	0611079A90	4700 ohms, ±5%; 1/10 W
R3022	0683986T01	1 ohm, ±5%; 1 W
R3023	0611079A50	100 ohms, ±5%; 1/10 W
R3024	0611077H31	274K, ±1%; 1/8 W
R3025	0611079B07	22K, ±5%; 1/10 W
R3026	0611077G34	27.4K, ±1%; 1/8 W
R3027	0611079A74	1K, ±5%; 1/10 W
R3028	0611079B23	100K, ±5%; 1/10 W
R3029	0611079A66	470 ohms, ±5%; 1/10 W
R3030,3031	0611079A66	470 ohms, ±5%; 1/10 W
R3100	0611079A66	470 ohms, ±5%; 1/10 W
R3101	0611079A26	10 ohms, ±5%; 1/10 W
R3102	0611079A66	470 ohms, ±5%; 1/10 W
R3103	0611072A17	47 ohms, ±5%; 1/4W
R3104	0611072A45	680 ohms, ±5%; 1/4 W
R3105	0611079A74	1K, ±5%; 1/10 W
R3106	0611079A98	10K, ±5%; 1/10 W
R3107	0611079A74	1K, ±5%; 1/10 W
R3108	0611072A45	680 ohms, ±5%; 1/4 W
R3200	0611079A26	10 ohms, ±5%; 1/10 W
R3201	0662057A73	CHIP RES 10K OHMS 5%
R3202	0662057A39	CHIP RES 390 OHMS 5%
R3203	0662057A89	CHIP RES 47K OHMS 5%
R3205	0662057A49	CHIP RES 1000 OHMS 5%
R3206	0662057A25	CHIP RES 100 OHMS 5%
R3207	0662057A01	CHIP RES 10 OHMS 5%
R3208	0611079A20	5.6 ohm, ±5%; 1/10 W
R3209	0662057A53	CHIP RES 1500 OHMS 5%
R3210	0662057A56	CHIP RES 2000 OHMS 5%
R3211	0662057A13	CHIP RES 33 OHMS 5%
R3212	0662057B47	CHIP RES 0 OHMS + .050 OHMS
R3213	0611077E31	221 ohms, ±5%; 1/8W
R3214,3215	0611072A37	330 1/4 W
R3216	0662057A29	CHIP RES 150 OHMS 5%
R3217	0662057A15	CHIP RES 39 OHMS 5%
R3218	0662057A29	CHIP RES 150 OHMS 5%
R3231	0611072A33	220 ohms, ±5%; 1/4 W
R3232	0611079A01	0 ohms, ±5%; 1/10 W
R3233	0611072A33	220 ohms, ±5%; 1/4 W
R3235	0611079A82	2200 ohms, ±5%; 1/10 W
R3236	0611079A70	680 ohms, ±5%; 1/10 W
R3237	0611079A01	0 ohms, ±5%; 1/10 W
R3238	0611072A13	33 ohms, ±5%; 1/4 W
R3239	0611079A60	270 ohms, ±5%; 1/10 W

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